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ISSUES, ECONOMICS AND THE DYNAMICS OF MULTI-PARTY ELECTIONS: THE BRITISH 1987 GENERAL ELECTION

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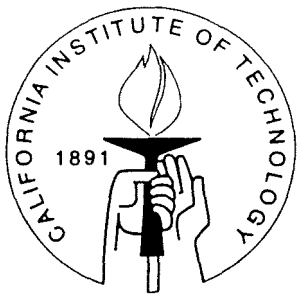

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Abstract

This paper offers a model of three-party elections which allows voters to combine retrospective economic evaluations with considerations of the positions of the parties in the issue-space as well as the issue-preferences of the voters. We describe a model of British elections which allows voters to consider simultaneously all three parties, rather than limiting voters to choices among pairs of parties as is usually done. Using this model we show that both policy issues and the state of the national economy matter in British elections. We also show how voters framed their decisions. Voters first made a retrospective evaluation of the Conservative party based on economic performance; and those voters that rejected the Conservative party chose between Labour and Alliance based on issue positions. Through simulations of the effects of issues – we move the parties in the issue space and re-estimate vote-shares – and the economy – we hypothesize an alternative distribution of views of the economy for voters – we show that Labour has virtually no chance to win with the Alliance as a viable alternative. Even if the Alliance (or the Liberal Democrats) disappears, Labour will need to significantly moderate its policy positions to have a chance of competing with the Conservative party. We argue that the methodological technique we employ, multinomial probit, is a superior mechanism for studying three-party elections as it allows for a richer formulation of politics than do competing methods.

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1 Introduction

There are at least two theories of voter-choice in multi-party elections. The first emphasizes retrospective voting: voters evaluate the incumbent party based on economic performance. The second theory emphasizes prospective voting based on issue-evaluations of each of the parties. The theories should be viewed as complimentary rather than alternative theories, because each theory by itself is inadequate to explain voter decisions in a multi-party setting. The retrospective voting model cannot explain how voters choose between competing out-parties if they decide to vote against the in-party. And the issue voting model does not allow voters to punish or reward the incumbent party for economic performance. In this paper we offer a model that allows for the integration and simultaneous testing of both of these theories. To test both theories we need to measure voters' views of the economy and voters' views of the parties' positions on the issues, and incorporate them into a single model.

Here we examine voter choice in the 1987 British general election with a model which allows us to examine the impact of both retrospective and prospective issues simultaneously for the three major parties. Previous research has shown that voters punish the incumbent party for poor economic performance (Alt 1979, Crewe 1992). We first determine how retrospective voting operates in a three-party race. We show that past economic performance influenced the likelihood of whether an individual would vote for

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the incumbent party (the Conservatives). And we also show that these same retrospective economic evaluations played little role in voter evaluations of the non-incumbent parties.

Previous work has examined the importance of issues in Britain (Alt 1979, 1984; Crewe 1992). Our model also lets us look at prospective issue voting in multi-party elections in a new way: we examine both how parties could influence their vote-share by moving in the issue space with the existing configuration of parties, *and* how the Conservative and Labour parties could influence their vote-share if the issue space were not crowded by the presence of the Social Democratic-Liberal Alliance. This gives us the opportunity to measure both the impact of prospective issue voting in a multi-party election and the electoral significance of a third party. Below we show that under the existing configuration of parties, none could substantially improve their vote-shares by moving in the issue space. But we show that if the Alliance were to drop out of British electoral politics, Labour could substantially increase their vote-share by moderating their issue positions. In general this analysis demonstrates that prospective issue voting is an important component of multi-party elections, since we present strong evidence which supports the hypothesis that individuals are much more likely to vote for parties closer to their own positions on a variety of issues.

In research on the British case, however, attention typically focuses only on vote shifts or judgments relating to the two main parties — Conservative and Labour. In such studies, researchers simply ignore the presence of the Liberal or Alliance parties, and usually remove those who vote for these parties from their analyses (e.g. McAllister and Studlar 1992). Such a focus necessarily downplays the role of minor parties such as the Liberal Democrats (to use their current name) or the Alliance (to use a previous label), and bleaches debates of any effects introduced by the presence of a third party. For example, the debate between Crewe (1992) and Heath et al. (1991) over the relative importance of issues within the 1987 election is largely carried on in terms of the judgments voters made comparing the Labour and Conservative parties on the relevant issues. Another tactic that has been employed in the study of British elections has been to assume that the Liberal or Alliance parties are positioned midway between the Conservative and Labour parties, which is not true on all the issues, and proceed to assign vote-shares to the parties (McAllister and Mughan 1987; Mishler et al. 1989).

A large part of this dichotomous "Conservative vs others" approach toward British elections has been driven by the availability of relevant estimation procedures: binomial probit and logit are readily available tools for analyzing two-party races. But a large part, too, reflects a willingness to make a strong assumption about the underlying conception of the party competition. Previous literature typically assumes, rather than demonstrates, that the choice made by British voters is primarily one between Labour and Conservative, rather than a three-way choice that also includes the Liberal Democrats. Yet the nature of this party competition is a question with an empirical answer. As such, we would be well served by adopting techniques of analysis which allow us to discern the way voters view their choices.

Comparisons between the two 'major parties' provide only limited insight into the choices made by voters who are faced with the task of simultaneously considering three parties. Some of the authors discussed so far recognize that this may be a problem. For example Heath et al. note: "one important reason why Labour does rather poorly according to this model is that the Alliance position was closer to Labour's than it was to the Conservatives' position, thus leaving the Conservatives with a larger territory over which to gather votes (Heath et al. 1991: 218)." By this they mean that Alliance and Labour split the left vote, suggesting that, despite their general thesis that issue effects did not determine the 1987 election outcome, issues may have an important role to play in the election in helping voters decide which opposition party to vote for. This, in turn, makes it clear that it is important to model vote choice over the three alternatives in one unified model. It is a fallacy to pretend that the third party does not affect the fortunes of the other two parties. A model which considers the choice over all three parties simultaneously, rather than separately, would allow us to determine the importance of issue effects in British elections, as well as to examine the impact of economic evaluations and more generally, retrospective voting, in the three-party setting. It would also allow us to determine the impact of the existing third party, as well as to estimate the impact of the withdrawal of the third party.[1] By ignoring the three choices voters face, other work underestimates the effects of issues.

We estimate a well-specified model of voter-choice in the 1987 election that contains at least four features which we feel make it superior to past efforts. First, we separate the three choices and allow the voter to consider simultaneously all three parties. Second, we do *not* make unduly restrictive assumptions about the impact of a third party on the relative probabilities of choosing either of the other parties. Third, we include explicit measures for the distance between respondents and parties on seven different issues. With these measures we estimate the impact of each issue on the vote-choice of individuals for all three parties *and* estimate the impact of movement by the parties on these issue-positions. Fourth, we include measures of voter evaluations of past economic performance on inflation, unemployment, and taxation. These variables allow us to examine retrospective economic voting for all three parties.

Use of such a model allows us to test directly the competing hypotheses we feel are still unanswered about British general elections. First, we examine the importance of the positions taken by the Labour party on key issues such as defense and nationalization. We find that these positions account for Labour's lack of success in the 1987 election. Second, we measure the impact of a major short-term force: voters' perceptions of the economy. We predict how different the election would have been had voters' perceptions of the economy been as they were in 1992, and we find both Labour and the Alliance would have received greater shares of the vote. Third, we ascertain how voters saw the parties as similar or dissimilar to each other. We find that voters perceived Labour and the Conservatives as dissimilar, but that the Alliance and Labour were similar alternatives. Fourth, we estimate where the Alliance voters would have gone if Alliance were not in the race. In a race of only Labour and the Conservatives, where both parties maintain the same positions on the issues, Labour receives slightly greater proportions of former

Alliance voters. But in a two-way race where Labour can adjust their issue positions in the absence of the Alliance, we show that Labour could obtain about as many votes as the Conservatives. All this allows us to pit the two major competing theories of elections against each other: economic-voting vs issue-voting.

1.1 Issue Voting in Britain

Within a general discussion of how to model vote choice within multi-party systems, there exists a specific debate over the impact of prospective issues in British general elections. This is one debate which an alternative modeling strategy can resolve. The debate itself is especially prominent in discussions of the 1987 general election. On the one hand work by Crewe (1987) stresses short term factors and in particular incumbent performance, while Heath et al. (1991) stress longer term social changes and downplay the role of factors such as incumbent performance. Both approaches share an underlying conception which sees a 'normal vote' for political parties largely determined by long term social changes. Deviations from this can be explained in terms of short term election specific effects. Crewe argues that the election specific effects are large in 1987, Heath et al. argue they are small certainly for this one election, and possibly in general.

The general thrust of Crewe's argument is to stress short term factors as relevant to vote choice. He notes that in "prosperity . . . lies the key to Conservative victory" (Crewe 1987 352). He argued that not only did people believe that both the economy in general and family living standards improved between Fall 1986 to Summer 1987 and that there also existed a "close coincidence" between economic perceptions and the Conservative/Labour vote. By that he seems to mean that Conservative voters generally thought the economy had done well, while Labour voters did not (see also Butler and Kavanagh 1988).

Crewe (1987) also stresses two other factors. First, he notes that the Labour leader Kinnock was a drag on the Labour party vote. While Kinnock marked a big improvement over the previous leader, Michael Foot, he was still an electoral liability. Mrs. Thatcher, however, was an electoral asset for the Conservative party. Second, Crewe claims that issue positions in general favored Labour (though defense was alleged to be a liability to Labour as it is to most left parties, including in a small way for the Alliance).[2] For Crewe, though, the central issue was that of the performance of the economy, and on this the Labour party was clearly at a disadvantage based on public perception of a generally rebounding economy.

Longer term social changes are made the centerpiece of the analysis by Heath et al. in their book *Understanding Political Change* (1991). They argue that performance criteria (incumbency, campaigns and personality) can account for relatively little of the Conservative result of 1987 when compared to earlier periods. Heath et al.'s argument is broader than the specific election of 1987, and often couched in relative terms (e.g. they compare results to a benchmark 1964 election and sometimes to a 1983 election).

Because of this it makes it difficult to state with any precision just what their argument is insofar as it specifically relates to 1987 but it does seem safe to state that they emphasize social changes such as a changing class structure, decline in religiosity and labor union membership as well as a rise in home ownership in explaining the Conservative victory.

Among many other arguments, Heath et al. disagree with Crewe over the impact of issues. Heath et al. demonstrate their argument that issues have a relatively slight impact through a Downsian analysis. They take the position of respondents on five 11 point policy scales and and assume that voters vote for the party which comes closest to their own position on each of the issues (Heath et al. 1991: 217). This is, of course, a straightforward arithmetic exercise on each issue. These individual issue distances are then combined into one overall scale and the same arithmetic is performed. For this overall measure the individual issues are added together with equal weight, which they justify, at least in part, by results which show no relationship between the reported importance of a given issue to vote choice and perceived policy distance between the two main parties (Heath et al. 1991: 180-182). As the authors themselves recognize, in combining the issues scales, issues on which the parties are seen to be close together necessarily carry less weight in the overall calculation of distance (Heath et al. 1991: 218). Assuming that each respondent would have voted for the party closest to them on this average distance scale, they claim that 28% would have voted Labour, 29% Alliance and 43% Conservative. Performance effects, which Heath et al classify as the short-term impact of the party on economic events and on issue considerations, are, at best, a residual category for them. They compare the predicted vote from their various simulations and the actual vote. Based on this, they claim that the combined impact of leadership/candidate effects *plus* incumbent performance effects *plus* pocket book effects gave the Conservative party 4% more than its 1964 total (and Labour 4% less). It is difficult to see how to translate a four point bonus between two elections over such a long period of time into some specific expectations about short term impacts, but it seems safe to say that Heath et al. do not think short term effects very important at all.

Garrett's work occupies, in some ways, a sophisticated middle position between these two bodies of literature (Garrett 1992). While anchoring a discussion of the 1987 election firmly in an extensive analysis of class and socio-economic impacts he argues that the Conservatives' social reforms essentially shifted the preferences of the electorate as a whole to the right, and closer to the Conservative party. And, for Garrett, it is this shift which provides an essentially issue voting basis for Conservative success. Thus while sharing Heath et al's concern for social forces he also shares Crewe's concern for what might be termed relatively short factors. However, in contrast to Crewe, who clearly sees retrospective and performance criteria as paramount, Garrett sees issue voting as much more central to the Conservative victory.

In sum, the literature is divided on the issue of whether issues and retrospective economic evaluations matter very much in British elections. In part, the debaters talk past rather than to each other because they have no unified model of vote choice which considers the choice over all three alternatives and which can offer precise estimates

of the impact of issues and the economy. More importantly, such a model would also allow direct estimation of how voters frame the voting choice, rather than relying upon a structure of choice imposed by the researcher.

1.2 An Initial Look at Voting in 1987

As an initial examination of the 1987 British election we present in Table 1 the percentage of voters supporting each party based upon respondents' demographic traits, economic perceptions, and issue positions. The data we use are taken from the 1987 British Election Study (Heath 1989). In accord with common class-based theories of British elections, there is a strong class-oriented effect seen in Table 1. While 53.4% of white-collar voters supported the Conservatives, Conservative support dropped to 34.6% among blue-collar workers. Similarly, 43.4% of the blue-collar respondents voted Labour, while Labour support dropped to 20.6% among white-collar workers. However, there was no large distinction between Alliance voting rates for the two groups: Alliance received 22% of votes from blue-collar workers and 26% of votes cast by white-collar workers.

[Table 1 Here]

We also present the voting behavior of respondents based upon whether they thought inflation, unemployment and taxes had decreased, stayed the same, or increased in the past year. Economic factors appeared to enter strongly into the determination of voter choices between the Conservative and Labour party, but less strongly into the decision as to whether to vote Alliance. The Conservative party did almost twice as well among those who felt inflation had stayed the same versus those who felt inflation had increased. Similarly, the Labour party did almost twice as well among voters who felt inflation had increased as among those who felt inflation had stayed the same. Yet there is again very little difference in the Alliance vote-share between the two groups of voters: 22.1% vs 26.8%. Similar patterns hold for respondents' voting behavior and their views of unemployment and taxes. The Conservative party was punished by those who disapproved of economic performance: and it was Labour, not Alliance, that appeared to be the beneficiary of this disapproval.

The data in Table 1 for voter issue positions and vote choice indicate that these issue perceptions may also have played a large role in this election. We present the percentage of voters choosing each party based on their self-reported views on defense, on the relative importance of government efforts to fight inflation or unemployment, on redistribution of income, and crime. Those respondents on the right of the issue on defense spending, government emphases on fighting inflation or unemployment, redistribution of income, and crime, voted Conservative, while those on the left of the issues voted Labour. The Alliance seems to have picked up support about equally from voters describing themselves as moderate or liberal on the issues, and ran worse among voters describing themselves as conservative on the issues. Unlike recent U.S. elections, there is no gender-gap between the parties. Each of the three parties does almost identically well among men and women voters.

Unfortunately these bivariate relationships can tell us little about the relative importance of class, economic evaluations, and issue-positions. To assess which set of factors were more important in this election, and to test the various accounts advanced about British elections in general, we need to turn to multivariate methods and develop a fully specified model of vote-choice.

2 Models of Multi-Party Elections

Any model of voter-choice should allow voters to consider simultaneously all three parties. It should allow voters to weigh the parties' positions on the issues, to consider the parties' performance on the economy, and it should allow voters of different demographic traits to have different preferences for different parties. Also, and this is especially important to three party races, it should not impose the Independence of Irrelevant Alternatives (IIA) property on the voters.

The IIA property holds if the ratio of the probability of voter i choosing alternative C to the probability of voter i choosing alternative L does not depend upon the other alternatives available in the choice set. Technically,

$$\frac{P_i(C)|\{S\}}{P_i(L)|\{S\}} = \frac{P_i(C)|\{T\}}{P_i(L)|\{T\}} \tag{1}$$

where S and T are sets of alternatives, both containing C and L, and $P_i(C)|\{S\}$ denotes the probability of the i^{th} voter choosing the Conservative party from choice set S; and $P_i(C)|\{T\}$ denotes the probability of choosing the Conservative party from an alternative set of choices, T. $P_i(L)$ is defined similarly for Labour.

Equation (1) says that given two choices – – C and L – – the ratio of the probability of choosing choice C to the probability of choosing choice L does not change if the set of choices is altered from set S to set T. In other words, even if set S contained only choices C and L, but set T contained choices C and L, as well as ten other choices, the i^{th} individual's *relative probabilities* of choosing C and L would be unchanged. In the British case, IIA implies:

$$\frac{P_i(C)|\{C, L\}}{P_i(L)|\{C, L\}} = \frac{P_i(C)|\{C, L, A\}}{P_i(L)|\{C, L, A\}} \tag{2}$$

Or, IIA implies that the presence or absence of the Alliance would not change the *relative* probabilities of any single voter choosing between Conservative and Labour. This is a very strong **substantive** assumption to make about voters; an assumption it would be preferable not to make since it might not be true. It suggests that voters are incapable of seeing one party as a substitute for another party. For instance, under IIA a voter could not see the Alliance as a substitute for Labour. Say a voter has a probability of .5 of voting for Labour and a probability of .5 of voting for Conservative in a two-party race. Now with the Alliance, if IIA is maintained, the voter could *not* have probability of .5 of

voting for Conservative, and probability .25 of voting for each of Labour and Alliance. Yet such a scenario is quite plausible for a voter who sees no difference between Labour and Alliance and simply views them as identical left alternatives.[3]

Since we do not believe that such a strong substantive assumption should be made about voters in multi-party elections, we specify and estimate a model of voter-choice using Multinomial Probit (MNP). MNP is a flexible estimation technique that does not impose IIA. This alone sharply distinguishes our research from all past published work on voter choice in multi-party systems, since all previous research used an estimation method which does impose the IIA restriction. And MNP allows for a very rich model specification. MNP is based on a random utility model, where each individual votes for the party for which she has the greatest utility. Random utility models assume that while individuals maximize their expected utility, these utilities are not known to the researcher with certainty and must be assumed to be random variables (Manski 1977). So, following the assumptions of random utility, we asume that each voter's utility is composed of an observed component (which we call the systemic component) and of an unobserved component (which we call the random component). The systemic component of utility can be specified with individual-specific variables, such as characteristics of the voter, and choice-specific variables, such as characteristics of the party; this allows a detailed examination in one empirical model of how differences among voters *and parties* influence voter choice. The random component of utility can arise from many sources: unobserved characteristics of the individual or the choice, variables which are measured imperfectly, or variables which are measured incorrectly (Ben-Akiva and Lerman 1985; Manski 1973). When we impose a specific set of assumptions about the distribution of the random component (here that they have a multivariate normal distribution) we obtain a specific random utility model (here MNP).[4]

The MNP model was developed by Hausman and Wise (1978). The Hausman and Wise MNP model assumes utility to be a function of the characteristics of the choices. We follow the Alvarez-Nagler (Alvarez and Nagler 1995b) implementation of MNP which assumes that the respondent's utility is a function of choice-specific and individual-specific characteristics:

$$V_{ij} = a_i \psi_j + X_{ij}\beta + \epsilon_{ij} \tag{3}$$

where:

V_{ij} = utility of the i^{th} voter for the j^{th} party

a_i = characteristics of the i^{th} voter

X_{ij} = characteristics of the j^{th} party relative to the i^{th} voter

ψ_j = a vector of parameters relating the characteristics of a voter to the voter's utility for the j^{th} party

β = a vector of parameters relating the relationship between the voter and the party (X_{ij}) to the voter's utility for the party

ϵ_{ij} = random disturbance for the i^{th} voter for the j^{th} party

So we estimate one set of β's (one for each prospective issue), and two sets of ψ's. One set of ψ's examines the relative effect of each voter attribute on the likelihood of the voter choosing Conservative over Alliance, the second set of ψ's examines the relative effect of each voter attribute on the likelihood of the voter choosing Labour over Alliance. [5]

Thus MNP offers us two advantages over Multinomial Logit (MNL). First, because MNP allows for correlation among the disturbance terms in the model it removes the IIA restriction from voters. Second, because the underlying model specification is based upon the issue position of the voter *relative to the party*, we are able to postulate a more realistic model of voter behavior, and draw more interesting inferences about the effect of changes in party behavior. The specification we use is a 'conditional' specification: it is conditional upon the characteristics of the choices. The specification of MNL models is *not* conditional upon the characteristics of the choices (i.e., the parties), it is only dependent upon the characteristics of the voters. For example, an MNL model would include the voters' positions on the issues, but not the parties' positions on the issues. This can lead to sloppy inferences - as well as limiting our ability to understand the implications of movement by the parties. We observe that voters who are conservative on defense do not like Labour. We all *know* that this is not just because the voter is conservative on defense, but rather that such voters are far from Labour on the issue. The conditional specification – – measuring this distance from voter to party – – is a better representation of the true model.[6]

The flexibility of the MNP technique gives us the opportunity to answer a number of questions about the 1987 British general election. First, we can determine the impact of a wide array of voter attributes on their choices in this election, controlling for many other competing factors. Second, we can examine the dynamics of party positions on prospective issues. Since the MNP technique allows us to consider the relative position of each of the three parties relative to voters, we can see how changes in party issue positions influence their expected vote shares. We also can see what might occur in British elections were one party — the Alliance — to drop out of electoral politics altogether. Last, through our estimates of the error correlations, we can begin to ascertain how British voters "group" the parties; instead of assuming certain groupings of the parties by the electorate, we estimate these groupings. No other estimation technique has the flexibility to examine each of these three areas. Thus we argue for the superiority of the MNP technique in empirical studies of multi-party elections.

In particular, the MNP technique is well-suited for the study of recent British elections. Since 1945, there have been three viable national parties in British politics, but it was not until the dual elections of 1974 that the Liberal party, in this period the electorally-weakest party, began obtaining roughly 20% of the national vote. And in 1983, with the Liberal/Social Democratic Alliance (Alliance) obtaining 25.4% of the national vote, just two percent lower than the Labour party, it looked as if British voters may have finally had a "real" third alternative. Thus, the emergence of the Alliance as

an option offered British voters in 1983 and 1987 three choices.

Yet British voters presumably do not view these three choices as truly distinct alternatives. Common wisdom holds that the Alliance is a substitute for Labour, or at least closer to Labour than to the Conservative party. However, even with this common wisdom, few empirical papers consider the possibility of the grouping of choices nor the possible violation of the IIA assumption (for example, see McAllister and Studlar (1992) or Stewart and Clarke (1992) on the 1987 British election). The MNP model we use is useful precisely because it allows us to both test for the violation of the IIA assumption, and, if IIA is violated, the model will also provide us insight into the structure of the choice process. Is the Alliance considered by voters as a substitute for Labour? Is the Alliance seen by voters as a choice more similar to Labour than to the Conservative party? What would happen if the Alliance dissolved? The MNP model allows us to answer precisely these questions.[7]

2.1 A Model of the 1987 Election

We view the voters' utility for each party to be a function of the voter's position on the issues *relative to the party*, and of characteristics of the voter which we describe below. The inclusion of issue variables in our models stems from the growing realization that "issues matter" in British elections, just as they "matter" in the electoral politics of many industrial democracies (Inglehart 1977). This stems also from the realization that the effect of class in British elections has slipped considerably (Crewe 1974; Crewe, Sarlvik and Alt 1977; Sarlvik and Crewe 1983). Working from the framework of the spatial model of elections, we include variables for the distance between the voter and each party on defense, government emphasis on inflation versus unemployment, taxes, redistribution of income, nationalization of industry, crime, and social welfare programs. The parties' position on each issue is taken to be the mean of the party placement on the 11 point issue scale by all respondents. We use the absolute value of the difference between respondents' position and the party's position as a measure of issue-distance on each item.[8]

Hand in hand with the realization that issues are replacing class in framing voter decisions in British elections is a growing realization of the effects of voter perceptions of the economy. This has occupied much of the empirical work on British elections (Alt 1979; Lewis-Beck 1988; Studlar, McAllister and Ascui 1990). Accordingly, we include in our models variables for the respondent's perceptions of recent changes in inflation, unemployment, and taxation levels (McAllister and Studlar 1992). This allows a test of the retrospective voting model in a three-party setting.

We also include demographic measures of the respondents. To allow for the possibility that class did matter in the 1987 election, we also include a number of control variables. First, we have an indicator of the voters' class affiliation: whether the voter occupied a blue-collar occupation or not.[9] Union membership has long been considered

a staple of Labour support, but it is possible that this source of support has diminished considerably with the dismantling of the trade union movement during the first two Thatcher administrations. We include a dummy variable for trade union members to examine the effect of union membership on voter-choice. As a third control for the effects of class, we have a dummy variable which measures whether or not the voter was a public-sector employee.[10]

Demographic variables other than class have loomed large in research on British elections. The regional divisions in recent British elections have spurred a flurry of works on regional influences on voting, even though the growing North-South political cleavage in British voting may be more of an artifact of economic divisions than anything specific to certain regions (Crewe 1992; McAllister and Studlar 1992). We include regional dummy variables in our models to test these assertions. With the massive sales of council houses during the Thatcher years, no doubt motivated to appeal to the moderately well-off working classes, it is asserted that home ownership played some role in Thatcher's success in 1987 (Crewe 1992). Accordingly, we have a dummy variable in the model for home ownership. We also include measures of the respondent's age, sex, income, and education.

2.2 MNP Estimates

We present the multinomial probit estimates in Table 2. The estimates for the issue distance variables are in the first seven rows; recall that we assume these effects to be constant across the parties. The other independent variables follow arranged in two columns. The first column contains coefficients for the Conservatives relative to the Alliance; the second column contains coefficients for Labour relative to Alliance. In the last three rows of Table 2 we present the estimates for the three error correlations. The standard-error for each coefficient is presented below the coefficient.

[Table 2 Here]

These estimates shed substantial light on a number of hypotheses. First, notice that *all of the issue distance variables have statistically significant effects.* Thus, each of these issues had a significant effect on voter choice in this election, controlling for all of the other variables in the model. The further a voter was from each party on each issue, the less likely the voter was to vote for that party. Additionally, some issues (defense, taxation, and nationalization) appeared to have had stronger effects on voter choice than the other issues, especially redistribution, crime, and government policy towards unemployment and inflation.

Perceptions of the national economy also affected voters' choices. We find that both perceptions of recent changes in inflation and in unemployment had a significant impact on Conservative voting relative to Alliance voting. For both variables, the positive sign implies that people who saw that inflation or unemployment had gotten better in the past year were significantly more likely to vote Conservative than Alliance. Neither of these

variables, nor the taxes variable, had a significant impact on determining whether a voter chose Labour over Alliance. This suggests that voters did not distinguish between Labour and Alliance based on retrospective economic issues. Thus as the retrospective model predicts, the incumbent party was punished or rewarded for respondents' views of the economy. However, apparently neither Alliance nor Labour convinced voters that they were the superior alternative on this dimension as the two challenging parties divided equally the spoils. Notice that this is different than the inference one could draw from Table 1. The bivariate results in Table 1 suggested that Labour won the votes of those dissatisfied with economic performance. But that relationship disappears in a fully-specified model.

The variables used to control for the effects of class-based voting in Britain (union members, public sector employees, blue collar workers, family income, and education) confirm the posited class-bias in voting between the three parties. Union members are significantly less likely to vote Conservative than Alliance, but more likely to vote Labour over Alliance. Family income shows a similar effect, with higher income voters being more likely to vote Conservative than Alliance, while being more likely to vote Alliance than Labour. Labour also had a large advantage over the other two parties with blue-collar voters.[11]

Last, we give the estimated error correlations at the bottom of Table 2. These account for factors not included in the systemic component of our multinomial probit specification, which are correlated across parties. Two of these three error correlations are statistically significant, those for the error correlation between Labour and Alliance (.34) and for Conservatives and Labour (-.39).[12] The three error correlations imply that British voters saw the Labour and Alliance parties as similar (i.e., as substitutes), but that the Conservative and Labour parties were viewed as clearly distinct. This lends support to two interpretations. First, British voters saw this election as a choice between a ruling incumbent party and two alternatives, similar to the usual theory of incumbent-based retrospective voting (Key 1966). That leads to a decision rule which would have British voters deciding whether to support the incumbent party or not, and if not, choosing between the Labour and Alliance party. Second, these error correlations can be seen as indicating an ideological structure to the decision making process for British voters in 1987, with the Conservative party seen as ideologically distinct, and with the Labour and Alliance seen as ideologically similar. Both of the first two interpretations could be correct.[13]

Methodologically, these significant error correlation estimates demonstrate that the "independence of irrelevant alternatives" condition will be violated, and estimation techniques such as multinomial logit which impose this assumption on the data are likely to produce incorrect inferences about voter decisions in this election. This helps underscore our belief that this is a restrictive assumption to make about voters in multi-party elections.

2.3 Effects of Economics and Issues

As with most discrete choice models, the coefficients from the multinomial probit model are difficult to interpret directly. The model is highly nonlinear, and the impact of estimated coefficients are all dependent upon the values taken by the other variables and coefficients in the model. Thus to obtain more informative interpretations of these results, we move to a series of secondary analyses of the estimated effects of the economy and issues in the 1987 British election.

Our first illustration of the substantive meaning of the multinomial probit estimates from Table 2 is through "first differences" (King 1989). First, we set all of the variables in the model at hypothetical values, and determine the probability that this hypothetical voter would support each of the three parties. The hypothetical voter we postulate here has a .34 probability of supporting the Conservatives, a .40 probability of supporting Labour, and a .26 probability of supporting the Alliance.[14] Then we alter one independent variable at a time and recompute predicted probabilities for the hypothetical voter with all other variables held at their 'initial' value. The difference between these probabilities is the effect of the change in the independent variable of interest.

The estimated first differences for the three retrospective evaluations of the national economy and for four of the issue distance variables are given in Table 3. At the top of the table we give the baseline probabilities for our hypothetical voter. Then for each variable of interest we show the marginal effect on support for each of the parties of changing the values of that independent variable from one end of the scale to the other. Beginning with the retrospective economic evaluations, notice that respondents' views of inflation and unemployment had a stronger effect on the choice of parties for our hypothetical voter than did changes in views of taxation. The first differences for change in Conservative support are .24 (inflation), .24 (unemployment) and .06 (taxation). Thus, our hypothetical voter would be .24 more likely to vote for the Conservative candidate if they thought that either inflation or unemployment had improved in the past year rather than had gotten worse, but only .06 more likely to vote Conservative if they thought taxation had become better over the past year. And notice that these changes in support seem to come equally from Labour and Alliance. The probability of our hypothetical voter choosing Labour could change by .13 based on his view of inflation; his probability of choosing Alliance could change by .11 based on inflation. The results for unemployment are similar. Thus apparently neither Alliance nor Labour convinced voters that they were the superior economic alternative. Again, we find support for the retrospective model: the estimated impact of changes in views of the economy is huge. Yet we also find that the retrospective model does not illuminate the choice between the two out-parties. The estimates for issue effects presented next however, do show how voters chose between the two out-parties.

[Table 3 Here]

We present similar results for four issues — redistribution, welfare, crime, and defense — in Table 3. Here we move the voter's position from one end of each issue

dimension to the other, keeping the party positions constant. While perhaps an extreme movement, it helps to demonstrate the power of issues in British politics, controlling for class and other demographic effects. These four issues have a dramatic effect on whether or not our hypothetical voter supports the Conservative or Labour party. Moving our hypothetical voter from the left to the right on each of these four issue scales increases the probability that he supports the Conservative candidate by as much as .21. Defense has the strongest impact on our hypothetical voter, followed by welfare, redistribution, and crime. Notice that there is little change in the probability of our hypothetical voter choosing Alliance party when we move the voter from the left to the right on these four issues. All the changes occur between the Conservative and Labour party.

The results for issue effects are not surprising when we consider the fact that the Alliance party staked out moderate positions — between the Conservatives and Labour — on each of the issues we examine. Table 4 displays the mean positions of the parties and respondents on each of the seven issue scales. These issue scales are 11-point scales, and the positions of the parties (the average positions taken from voter placements of the parties in the survey data) show a large amount of separation between the Conservative and Labour parties in this election. On welfare and defense (the two issues with the largest effect in Table 3), the differences between the Conservative and Labour parties are substantial, over 3 points on these scales. For crime, the issue with the least effect in Table 3, notice that the parties staked out very similar positions, with only about one point on these scales separating each party.[15]

[Table 4 Here]

This supports the implications of theoretical discussions in the literature about American national elections. Early debates by Shepsle (1972) and Page (1978) both showed, in the context of different models of campaign dynamics, that candidates and campaigns often have the strategic incentive to obfuscate their positions to the electorate, echoing work by Key (1966). If the voters cannot perceive a distinction between the parties on certain issues, it is difficult for those issues to factor strongly in voter decision making (Alvarez 1996). Here we see strong support for the obvious implication of these models, since the issues with the most party separation are the issues with the most influence on our hypothetical voter. We also see that on every issue except crime Alliance was closer to the mean respondent position than each of the other two parties.

2.4 Effect of the Alliance

Since we can predict the probability of an individual respondent choosing each of the three parties using the MNP estimates, we can also predict the aggregate vote-share of each of the three parties. More importantly, the MNP estimates allow us to predict aggregate vote-share in a *two-party* race with Alliance omitted: we are able to use the estimates from the systemic component of utility for the remaining two parties *as well as* the information in the estimated correlations between the disturbance terms to predict the probability of each voter choosing the Labour or Conservative parties. This allows us

to estimate the impact of Alliance on the election. We predict a 44.9%-29.8%-25.3% split in a three-way race; this gives Labour a 39.9% share of the two-party vote between the Conservative party and Labour. If Alliance disappears, leaving a two-way race between the Conservative party and Labour, we predict a 57.4%-42.6% split. Thus the removal of the Alliance helps Labour somewhat. However, to see the real impact of the Alliance on the election we need to take a more dynamic view of the election and consider the behavior of the parties as well as the voters. In the following section we consider such behavior by the parties: we simulate the effects of changes in issue positions by the three parties.

2.5 The Issues

Changes in respondents' ideological positions may not be as interesting to consider as changes in parties' ideological positions. After all, a major criticism of the Labour party is that they have taken positions that have led to their being placed far from the center of mass of voters. What would happen if Labour convinced voters that the party were more moderate? Could Labour have done better by trying to move to alternative issue positions? To find out, we moved Labour's perceived position on each of the seven issue dimensions, one issue at a time. We then recomputed the distance from each respondent to Labour on the issues, and then computed new predicted vote-shares for each party, with Labour at the postulated position.

We perform these calculations both with the Alliance present, and under the counter-factual scenario of a two-party race between Labour and the Conservative party with the Alliance omitted. As the simulation will show, the effects of movement by the parties in a three-party race are much smaller than the effects of movement by the parties in a two-party race. In Table 5a we show: the position on each issue at which Labour would have received its lowest share of the vote; Labour's actual (mean perceived) position on each issue; and the position on each issue Labour would have had to be at to maximize its vote-share (indicated by Labour-Max*). We also show the predicted vote-share of all three parties had Labour been perceived to be at Labour-Max* on each issue, and in the final row of the table we show the predicted vote-shares for the parties had Labour moved to Labour-Max* *simultaneously* on all seven issues. Labour's predicted vote-share based on its actual perceived positions on the issues was 29.8%. According to Table 5a, the best Labour could do by shifting on any one issue would be to increase its predicted vote-share to 32.4% by moving from the left to the center on the Nationalization issue. If Labour shifted public perception of its positions on all seven issues, then it would still receive a predicted vote-share of only 36.2%; this is an increase of 6.4%, but would still leave Labour almost 5% behind the Conservative party. Thus while Table 5a provides guidance as to where the Labour party should move on the issues, it also clearly indicates that issue positions in and of themselves, cannot account for Labour's poor electoral fortunes.

[Table 5a **Here**]

The apparent magnitude (or lack thereof) of these issue effects might be surprising given the estimates presented in Table 3. For instance, we predict that a respondent changing their view on defense could increase their probability of voting for Labour by .24; yet Table 5a indicates that Labour only has 2.2% to gain by moving on defense, not 24%. This is because the impact of movement by a party is limited by two things. First, moving closer to some voters necessarily means moving further from other voters. Second, the issue-space is crowded. Labour is competing with two other parties, and any movement towards the center will leave it closer to another party which it must share voters with.

The second problem described above might lead supporters of Labour to hope for better results if Alliance would simply disappear and leave the issue-space less crowded. The MNP estimation technique allows us to predict the probability of a voter choosing Labour or Conservative without Alliance as an option. As stated earlier, we are able to utilize the information obtained from the MNP estimates, the impact on the respondents' utility of his/her distance from the parties as well as the correlation among disturbances, to estimate how voters would behave in the absence of Alliance. We performed simulations identical to those presented in Table 5a, moving Labour on each issue and reestimating vote-shares to find Labour's optimal position, in a two-party race without Alliance. As reported in Table 5b, Labour's maximum share of the vote in a two-way race by moving on any single issue is 45.4%. By moving on all seven issues, Labour's hypothetical vote-share rises to 49.8%. Note that this is higher than Labour's largest share of the two-party vote reported in Table 5a (36.2 / (36.2 + 41.9) = 46.4%). Thus we very clearly see the problem Alliance causes for Labour. By positioning itself in the center on the issues, Alliance both takes votes from Labour, and minimizes the ability of Labour to improve its vote-share by strategic movement on the issues.

[Table 5b Here]

We show in Tables 6a and 6b identical simulations, but focusing on the Conservative party. In Table 6a, notice that our estimates reveal that the Conservatives took *more conservative* stances that electorally necessary on all issues but crime. Thus, slight moderation in the Conservative message in 1987 would have produced small vote-share gains for the Conservatives, ranging from just under 1% for moderating on nationalization and redistribution to almost 3% for moderation on defense. Notice also the combined effect of moving the Conservatives to their optimal position on all of the issues at once — they win with 61% of the vote. Finally, removing the Alliance while moving the Conservatives to their best position on each issue produces overwhelming Conservative victories on each issue (Table 6b).

[Tables 6a and 6b Here]

We performed similar simulations for the Alliance, and present the results in Table 7. On every issue other than crime the Alliance managed to position itself closer to the public than either the Conservative or Labor party. Thus Alliance really had less to gain by modifying its positions, and we see in Table 7 that its actual position was quite

close to its optimal position on most issues. The delicate balancing act of the Alliance is apparent in the second and third columns of Table 7. Alliance was slightly to the left of its optimal position on defense, nationalization and crime; and was slightly to the right of its optimal position on the Phillips curve, taxation, redistribution and welfare. Had the Alliance taken its optimal position on any particular issue it would never exceed the vote-share of the Labour party. Even by taking the optimal positions on all of these issues — engaging further in their delicate positioning between the parties — the Alliance would have only come very close (less than one percentage point) to overtaking Labour in the 1987 election.

[Table 7 Here]

2.5.1 The Economy

Yet parties, especially the incumbent party, have more strategic levers to operate than just their position on issues. For instance, there has long been debate over whether the economy matters in national elections, and whether the incumbent party has sufficient tools to manipulate the macroeconomy for electoral purpose (Alesina 1987; Alt 1985; Alvarez, Garrett and Lange 1991; Hibbs 1987; Lewis-Beck 1988; Tufte 1978). We have already shown in Tables 2 and 3 that variables measuring the voter's retrospective evaluation of recent economic performance mattered greatly in the 1987 British election, controlling for issue, class, and other demographic effects.

But these results are quite static, and tell us little about the dynamics of the macroeconomy and voter preferences. We would like to know what to expect if overall macro-economic conditions changed. In Table 8 we give simple survey frequencies on the three economic retrospective evaluations in 1987 and 1992. We are interested in understanding how the British economy appeared to voters in 1987 relative to another benchmark, and we chose the 1992 election since the survey questions in the 1992 British General Election study are almost identical to those in the 1987 data.

Notice, the distributions of public opinion shifted dramatically on inflation and unemployment. From 1987 to 1992, many more British voters felt that the economy had worsened considerably, with 19% more voters seeing inflation as increasing a lot, and 24% more voters seeing unemployment as increasing a lot in 1992. Even taxes seemed to be increasing to the British, with 12.8% more voters seeing taxes as having increased a lot in this period.

[Table 8 Here]

This implies that, relative to 1992, the economy in 1987 was more favorable to the Conservatives — the incumbent party — and that the economic conditions in 1987 may have enhanced the Conservative victory that year. We can see the effect that the economy had in 1987 by using the multinomial probit results to simulate the predicted vote shares for the three parties under the scenario that the 1987 economy was as bad for the Conservatives as it appears to have been in 1992.

In Table 9 we present a series of simulations which change the aggregate distribution of economic perceptions among voters in 1987 to match those held by voters in 1992. We begin by presenting the sample distribution of vote shares in 1987, and then simulate the effects of changing voter retrospective economic perceptions across the different variables: inflation, unemployment, and taxes. Here there is a surprising result. If we make the economy as "bad" for the Conservatives as it appeared to be in 1992, that is, we have substantial numbers of British voters who felt that inflation, unemployment and taxes had all increased considerably in the past year, we still see the Conservatives winning the 1987 election. The difference between the first row and the last row in Table 9 shows only a 3.7% loss for the Conservatives, which is split between Labour, which gains 1.6% of the vote share and Alliance, which gains 2.1% of the vote. Thus, while an important predictor of which party individuals supported in 1987, the state of the macroeconomy does not seem to have determined the outcome of the 1987 British election. Had the economy been as bad as it was in 1992, the Conservatives still would have won over 40% of the vote.

[Table 9 Here]

3 Conclusion and Discussion

We have uncovered factors driving the decision of the British voter in simultaneously choosing between three parties. The decision on whether to support the Conservative party in 1987 was largely retrospective: economic evaluations of individual voters were crucial to determining the likelihood of voting for the Conservatives. However, individual economic evaluations had very little impact on the choice between Labour and Alliance in 1987; rather issue positions had a huge impact on the likelihood of voting for the Labour party. Thus we see that voters supported the incumbent party based on the economic performance; then chose between the two remaining alternatives based on issues.

We also have shown that Alliance takes more votes from Labour than from the Conservatives. More importantly, we have shown that the Alliance severely limits Labour's strategic options and leaves Labour almost no chance of winning an election. Alliance simply crowds Labour in the issue-space. Even moving to the correct position on the issues, and a dismal economy would not help Labour if Alliance remained. Of course our analysis also reveals that Labour is not helping its own cause by choosing issue positions so far to the left. What does this say about "short-term" vs "long-term" effects? It says they both matter, and that Labour has long-term problems. Our contribution here is to *measure* the short-term effects and *demonstrate* their magnitude. Similar analyses of British elections over time (a project beyond the scope of this paper) could offer similar measurement of the long-term factors.

Both these findings show that retrospective and prospective issues matter greatly in British elections. The translation of both models of voting from their usual two-party setting to the more complicated multi-party setting shows the resiliance of these

models and the differences between the two types of political settings. In multi-party settings, past economic performance can be used by voters when they decide to support the incumbent party or not. In multi-party settings, prospective issues factor heavily into both the calculations by parties and voters. Our results show that prospective issues positions are the criteria used by voters to decide which non-incumbent party to support.

These findings come as the consequence of significant methodological advances in our examination of the 1987 British election. We have used a technique new to the study of multi-party elections, multinomial probit, which has given us the ability to study voter choices for the three major parties in this election *simultaneously* and without restrictive and erroneous assumptions about the parties and the electorate. The MNP technique also gives us a unique perspective on the dynamics of multi-party politics, since we can determine the effects of changes in the positions of the parties on the choices of British voters. We can also determine the effects of changes in the party system — in this case, the effects of removing the Alliance from the election — on voter choices. The ability of the MNP technique to study these components of party politics is unique, since none of the alternatives advanced in the literature can answer these questions.

While our focus has been on the role of prospective and retrospective issues in this British election, we differ from past work on British elections by examining the effects of both types of issues by simultaneously allowing for these, and other, influences on voter choice. Here we have simultaneously modeled the effects of prospective issues, economic issues, region, class, and other social attributes of individual voters. Few studies of British elections can make this claim. That we find prospective and retrospective issues to have such strong effects on the choices made by British voters, while controlling for region, class, and demographic characteristics, should end the debate over whether issues and the economy "matter" in British elections. Instead, the focus should shift towards discussion of "how much" prospective and retrospective issues matter, and how their impact in particular elections contrasts to other British elections, and to elections in other similar nations. Only then can British elections be placed in their appropriate comparative context.

But this work has general implications to all multi-party systems, since they are usually seen as qualitatively distinct from two party systems (Duverger 1954, Sartori 1976). Political science has been captivated with the notion that two-party systems imply stability and multi-party systems invite fluidity, and hence chaos, ever since the collapse of the Weimer Republic [16] However, with very few exceptions most approaches to studying voter behavior in multi-party systems suppress the very multi-partyism which make such systems interesting. In multi-party systems we do not expect parties to converge to the center, so the strategic calculation of parties about where to position themselves on the issues relative to the voters is crucial for understanding the politics of these systems. Parties are also more likely to drop out, or new parties are more likely to enter, in multi-party systems. We have demonstrated that the presence of a third party crowding up the issue space does increase the likelihood of an extreme party winning the election. We have also shown that if a party drops out of a multi-party system, it

provides opportunities for the existing parties to redefine themselves in the issue-space to appeal to a larger set of voters.

Notes

1. Whitten and Palmer (1995) use multinomial logit to study the choices of British voters for the three parties in the 1987 election. While multinomial logit does provide statistical efficiency compared to successive binary logits, Whitten and Palmer are mistaken when they imply that their multinomial logit results differ substantively from a series of binary choice models comparing the two-party pairings. More importantly, by only having voter-specific characteristics as independent variables, rather than measures which incorporate the party's issue positions, Whitten and Palmer are unable to determine the impact of movements by the parties on the issues, which is one of the fundamental substantive concerns of the recent literature on British elections. See Alvarez and Nagler (1995a) for further discussion of this point.

2. However, we provide contrary evidence in Table 4.

3. This is an extreme case as most voters could distinguish between Labour and the Alliance, but the point should be clear.

4. By making other assumptions about the distribution of the random component we obtain different random utility models. If we assume the random component has a type I extreme value distribution and is independently and identically distributed, we obtain a flexible form of the multinomial logit model (McFadden 1973) which imposes the IIA assumption. Alternatively, by assuming the random component has a generalized extreme-value distribution, we obtain a form of the nested logit model which allows for very limited relaxation of the IIA assumption (McFadden 1978).

5. We also estimate three error correlations. In this analysis the disturbances are assumed to be multivariate normal, with mean zero and covariance matrix Σ. The off-diagonal elements of Σ give the correlations between pairs of disturbances, assuming that variance of each disturbance is one.

6. Conditional Logit (CL) would allow us to model the position of the voter relative to the parties; but would still impose IIA. Thus CL is to be much preferred to MNL; but is not as general as MNP.

7. These models can also give insight into the dynamics of the possible groupings of choices by British voters. It is quite possible that as party fortunes change, as their positions and general ideologies change, or as they go in and out of control of Parliament, that the similarities voters see between the parties may change as well.

8. By using the distance from the respondents' self-placement to the mean placement of

each party – – rather than the distance from the respondents' self-placement to the respondents' placement of the party – we avoid contaminating our measure with the tendency of respondents to project their favored candidates closer to their own ideal issue position.

9. Categories one through six of the occupation variable (as well as military) were coded as blue-collar; see Heath (1989) for a full listing of the occupation codes.

10. We have examined alternative operationalizations for the role of class in this election. In particular, we used the Heath-Goldthorpe categorization of individuals into occupation groups (Salariat, Routine nonmanual, Petty bourgeoisie, Foremen and technicians, and working class [Heath et al. 1985]). This alternative specification of class did not add explanatory power to our model, and we do not present those results here. They are available from the authors.

11. As mentioned earlier, we also used the Heath-Goldthorpe classification system of individuals into occupation-class groups. These classifications were added to the MNP model discussed in the text, and we re-estimated our model with four dummy variables for Salariat, Petty bourgeoisie, routine nonmanual and foremen and technicians (the working class was the excluded category). A likelihood ratio test between this expanded model and the one presented in the text produced a χ^2 value of 5.8, which is well below the critical χ^2 value of 15.5 with 8 degrees of freedom. This means that the addition of the Heath-Goldthorpe variables do not contribute statistically to the explanatory power of our model. Additional examination of the results of the expanded model shows that *all coefficients of interest in our analysis — in particular, the estimates for issue distances, retrospective economic evaluations, and the error correlations — are not significantly different between these two specifications.* These results are available from the authors.

12. Were none of the error correlations significantly different than 0 then we could not reject the Conditional Logit model. Conditional Logit and MNP share the same systemic component of th emodels. the utility for each choice is conditional upon the characteristics of the choice as well as the voter, but CL assumes independent disturbances.

13. The MNP estimates of both the random and systemic components of our model are based on the assumption of sincere voting in the 1987 British election. Sincere voting occurs when people vote for their most preferred candidate without taking into account that candidate's chances; strategic voting occurs when people compare their preferences *and* the candidate's chances and for for a less-preferred candidate rather than waste their vote (Abramson, Aldrich, Paolino and Rohde 1992). While theoretically there are reasons based on the calculus of voting (Downs 1957; McKelvey and Ordeshook 1972; Riker and Ordeshook 1968) to suspect that strategic voting occurs, empirical support for strategic voting in multi-party or multi-candidate elections has been found only in Canadian elections (Black 1978),

American presidential primaries (Abramson, Aldrich, Paolino and Rohde 1992), and British elections (Cain 1978; Franklin, Niemi and Whitten 1994; Galbraith and Rae 1989; Health et al. 1991; Johnston and Pattie 1991; Niemi, Whitten and Franklin 1992). Perhaps the limited evidence is due to the fact that few voters consider that their vote has an effect on the eventual outcome of the election (Barry 1970; Ferejohn and Fiorina 1974, 1975). In any case, we re-estimated the MNP model presented in Table 2 with three variables which measured whether each of the parties came last in the voter's constituency in 1983. We expect that these coefficients ought to be negative if voters acted strategically in 1987. We found that each of these coefficients was negative, and that two (Conservatives and Labour being last in the constituency) were statistically significant. Most important, though, is the fact that the other estimates in our model are *not* influenced by the addition of the strategic voting variables. Thus the interpretations of the MNP results in this paper are not influenced by sophisticated voting behavior. We leave the issue of strategic voting in this election for a subsequent paper.

14. The hypothetical voter is set to be at the sample mean distance from each party on each issue. This voter is male, a blue-collar union member, from the north, who owns his own home. He is also of mean income, education, and age. Last, his perceptions of the economy were also set to the sample mean values. While the actual values of the independent variables we use to construct our hypothetical voter do influence the baseline probability estimates, they do not have much influence on the important quantitites — the probability differences. In other words, different hypothetical voters would still produce the probability differences we present in Table 3.

15. The issue placements in Table 4 illustrate the error involved in many analyses of British elections — assuming the Alliance party to be positioned exactly between the Conservatives and the Labour party (c.f. McAllister and Mughan 1987; Mishler et al. 1989). On some issues like defense, the Alliance was virtually positioned at a point midway between the two major parties. But on many social issues — examples here are redistribution and welfare — notice that the position of the Alliance is much closer to Labour's than to the Conservatives. Making incorrect assumptions about party positions clearly will lead to inaccurate understandings of British elections.

16. One articulation of this view is in Epstein (1967). In general, party system attributes (like the number of parties) are argued to be a strong factor in determining a nation's political stability (Almond 1960; Duverger 1954; Huntington 1968; Lipset and Rokkan 1967; Powell 1981, 1982; Sartori 1976). More recently, Bartolini and Mair argued: "the number of parties matters, and variance in this number contributes substantially to the explanation of variance in electoral stability (1990: 143).

4 References

Abramson, P. R., J. H. Aldrich, P. Paolino, and D. W. Rohde. 1992. "'Sophisticated Voting' in the 1988 Presidential Primaries." *American Political Science Review* 86: 55-69.

Alesina, A. 1987. "Macroeconomic Policy in a Two-party System as a Repeated Game." *Quarterly Journal of Economics* 102: 651-78.

Almond, G. A. 1960. "Introduction: A Functional Approach to Comparative Politics." In G. A. Almond and J. S. Coleman, editors, *The Politics of the Developing Areas.* Princeton: Princeton University Press.

Alt, J. E. 1979. *The Politics of Economic Decline.* New York: Cambridge University Press.

Alt, J.E. 1984. "Dealignment and the Dynamics of Partisanship in Britain." In *Electoral Change in Advanced Industrial Democracies: Realignment or Dealignment*, ed. R. J. Dalton, S. C. Flanagan, and P. A. Beck. Princeton: Princeton University Press.

Alt, J. E. 1985. "Party Strategies, World Demand, and Unemployment: Domestic and International Sources of Economic Activity." *American Political Science Review* 70: 1016-40.

Alvarez, R. M., G. Garrett, and P. Lange. 1991. "Government Partisanship, Labour Organization and Macroeconomic Performance." *American Political Science Review* 85: 539-556.

Alvarez, R. M. and J. Nagler. 1995a. "Choice Models for Multi-Candidate Elections". Unpublished Manuscript.

Alvarez, R. M. and J. Nagler. 1995b. "Economics, Issues and the Perot Candidacy: Voter Choice in the 1992 Presidential Election." *American Journal of Political Science* 39: 714-744.

Alvarez, 1996. *Issues and Information in Presidential Elections.* Ann Arbor: University of Michigan Press, forthcoming.

Bartolini, S. and P. Mair. 1990. *Identity, Competition, and Electoral Availability.* New York: Cambridge University Press.

Barry, B. 1970. *Sociologists, Economists and Democracy.* London: Collier-Macmillan.

Ben-Akiva, M. and S. R. Lerman. 1985. *Discrete Choice Analysis.* Cambridge, Mass.: The MIT Press.

Black, J. H. 1978. "The Multicandidate Calculus of Voting: Application to Canadian Federal Elections." *American Journal of Political Science* 22: 609-38.

Butler, D. and D. Kavanagh. 1988. *British General Election of 1987.* New York: St. Martin's.

Cain, B. E. 1978. "Strategic Voting in Britain." *American Journal of Political Science* 22: 639-55.

Crewe, I. 1974. "Do Butler and Stokes Really Explain Political Change in Britain?" *European Journal of Political Research* 2: 183-215.

Crewe, I. 1992. "The 1987 General Election." In *Issues and Controversies in British Electoral Behavior*, ed. D. Denver and G. Hands. Harvester Wheatsheaf, London p. 343-354.

Crewe, I., B. Sarlvik and J. Alt, 1977. "Partisan Dealignment in Britain, 1964-1974." *British Journal of Political Science* 7: 129-190.

Downs, A. 1957. *An Economic Theory of Democracy.* New York: Harper and Row.

Duverger, M. 1954. *Political Parties.* New York: John Wiley.

Epstein, L. D. 1967. *Political Parties in Western Democracies.* New York: Praeger.

Ferejohn, J. A. and M. P. Fiorina. 1974. "The Paradox of Not Voting: A Decision Theoretic Analysis." *American Political Science Review* 68: 525-36.

Ferejohn, J. A. and M. P. Fiorina. 1975. "Closeness Counts Only in Horseshoes and Dancing." *American Political Science Review* 69: 920-25.

Fiorina, M. P. 1981. *Retrospective Voting in American National Elections.* New Haven: Yale University Press.

Franklin, M., R. Niemi, and G. Whitten. 1994. "The Two Faces of Tactical Voting." *British Journal of Political Science* 24: 549-557.

Galbraith, J. W. and N. C. Rae. 1989. "A Test of the Importance of Tactical Voting: Great Britain, 1987." *British Journal of Political Science* 19: 126-36.

Garrett, G. 1992. "The Political Consequences of Thatcherism." *Political Behavior* 14: 361-382.

Hausman, J. A. and D. A. Wise. 1978. "A Conditional Probit Model for Qualitative Choice: Discrete Decisions Recognizing Interdependence and Heterogeneous Preferences." *Econometrica* 46: 403-426.

Heath, A., R. Jowell, and J. Curtice. 1985. *How Britain Votes.* New York Pergamon.

Heath, A. 1989. *British Election Study, 1987. A Computer File.* Colchester: ESRC Data Archive.

Heath, A., J. Curtice, R. Jowell, et al. 1991. *Understanding Political Change: The British Voter 1964-1987.* Oxford: Pergamon Press.

Hibbs, D. A. 1987. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71: 1467-87.

Huntington, S. P. 1968. *Political Order in Changing Societies.* New Haven: Yale University Press.

Johnston, R. J. and C. J. Pattie. 1991. "Tactical Voting in Great Britain in 1983 and 1987: An Alternative Approach." *British Journal of Political Science* 21: 95-128.

Key, V. O. 1966. *The Responsible Electorate.* New York: Vintage.

King, G. 1989. *Unifying Political Methodology.* New York: Cambridge University Press.

Lewis-Beck, M. S. 1988. *Economics and Elections.* Ann Arbor: University of Michigan Press.

Lipset, S. M. and S. Rokkan. 1967. *Party Systems and Voter Alignments.* New York: Free Press.

Manski, C. 1973. *The Analysis of Qualitative Choice.* Cambridge, MA: MIT, Ph. D. Dissertation.

Manski, C. 1977. "The Structure of Random Utility Models." *Theory and Decision* 8: 229-254.

McAllister, I. and A. Mughan. 1987. "Class, Attitudes and Electoral Politics in Britain, 1974-1983." *Comparative Political Studies* 20: 47-71.

McAllister, I. and D. T. Studlar. 1992. "Region and Voting in Britain, 1979-87: Territorial Polarization or Artifact?" *American Journal of Political Science* 36: 168-99.

McFadden, D. 1973. "Conditional Logit Analysis of Qualitative Choice Behavior." In *Frontiers in Econometrics*, edited by P. Zarembka. New York: Academic Press.

McFadden, D. 1978. "Modeling the Choice of Residential Location." *Spatial Interaction Theory and Residential Location*, edited by A. Karlquist et al. Amsterdam: North-Holland.

McKelvey, R. D. and P. C. Ordeshook. 1972. "A General Theory of the Calculus of

Voting." In *Mathematical Applications in Political Science*, vol. 6, edited by J. F. herndon and J. L. Bernd. Charlottesville: University of Virginia Press.

Mishler, W., M. Hoskin, and R. Fitzgerald. 1989. "British Parties in the Balance: A Time-Series Analysis of Long-term Trends in Labour and Conservative Support." *British Journal of Political Science* 19: 211-36.

Niemi, R. G., G. Whitten, and M. Franklin. 1992. "Constituency Characteristics, Individual Characteristics, and Tactical Voting in the 1987 British General Election." *British Journal of Political Science* 22: 299-54.

Page, B. I. 1978. *Choices and Echoes in Presidential Elections.* Chicago: University of Chicago Press.

Powell, G. B. 1981. "Party Systems and Political System Performance in Contemporary Democracies." *American Political Science Review* 75: 861-879.

Powell, G. B. 1982. *Contemporary Democracies.* Cambridge: Harvard University Press.

Riker, W. H. and P. C. Ordeshook. 1968. "A Theory of the Calculus of Voting." *American Political Science Review* 62: 25-43.

Sarlvik, B. and I. Crewe, 1983. *Decade of Dealignment.* Cambridge: Cambridge University Press.

Sartori, G. 1976. *Parties and Party Systems.* New York: Cambridge University Press.

Shepsle, K. A. 1972. "The Strategy of Ambiguity: Uncertainty and Electoral Competition." *American Political Science Review* 66: 555-68.

Stewart, M. C. and Clarke. H. D. 1992. "The (Un)Importance of Party Leaders — Leader Images and Party Choice in the 1987 British Election." *Journal of Politics* 54: 447-470.

Studlar, D. T., I. McAllister and A. Aseu. 1990. "Privatization and the British Electorate: Microeconomic Policies, Macroeconomic Evaluations, and Party Support." *American Journal of Political Science* 34: 1077-1101.

Tufte, E. R. 1978. *Political Control of the Economy.* Princeton: Princeton University Press.

Whitten, G. D. and H. D. Palmer. 1995. "Heightening Comparativists' Concern for Model Choice: Voting Behavior in Great Britain and the Netherlands." Forthcoming, *American Journal of Political Science.*

Table 1:
Vote Choice By Respondents' Views and Characteristics[a]

		Conservative		Labour		Alliance	
		%	N	%	N	%	N
Class	White-Collar	53.4	908	20.6	351	26.0	442
	Blue-Collar	34.6	458	43.4	574	22.0	291
Inflation[b]	Decreased	62.5	5	12.5	1	25.0	2
	Same	56.4	898	21.5	342	22.1	352
	Increased	32.5	467	40.8	587	26.8	385
Unemployment[b]	Decreased	59.6	31	25.0	13	15.4	8
	Same	60.2	844	19.5	274	20.3	284
	Increased	30.4	468	41.2	634	28.3	436
Taxes[b]	Decreased	65.9	56	17.6	15	16.5	14
	Same	48.4	1175	27.0	654	24.6	597
	Increased	23.8	64	53.5	144	22.7	61
Defense[c]	Conservative	64.3	288	19.6	88	16.1	72
	Moderate	56.3	839	18.0	269	25.7	383
	Liberal	21.5	229	52.9	563	25.6	272
Phillips Curve[c]	Conservative	72.1	243	12.8	43	15.1	51
	Moderate	64.4	383	13.3	79	22.4	133
	Liberal	35.2	732	38.4	798	26.4	548
Redistribution[c]	Conservative	74.9	616	6.9	57	18.1	149
	Moderate	49.7	362	22.1	161	28.2	205
	Liberal	25.2	359	48.8	697	26.0	371
Crime[c]	Conservative	50.8	834	27.6	453	21.6	355
	Moderate	44.3	422	29.0	276	26.8	255
	Liberal	23.4	88	47.1	177	29.5	111
Gender	Men	44.8	652	30.9	449	24.3	353
	Women	45.6	730	30.3	485	24.2	387
Sample		45.2	1382	30.6	934	24.2	740

[a] Table entries are the percentage (or number) of each row-variable voting for the designated party. Percentages sum to 100 across rows.

[b] For inflation, unemployment, and taxes, each row corresponds to voters claiming the economic indicator had decreased, stayed the same, or increased in the past twelve months.

[c] For defense, Phillips Curve, redistribution, and crime, each row corresponds to where voters place themselves on the issue.

Table 2:
Multinomial Probit Estimates, 1987 Election: (Alliance Coefficient Normalized to Zero)

Independent Variables	Conservatives		Labour
Defense		-.14*	
		.01	
Unemployment/Inflation		-.09*	
		.02	
Taxation		-.13*	
		.02	
Nationalization		-.14*	
		.01	
Redistribution		-.07*	
		.01	
Crime		-.08*	
		.03	
Welfare		-.11*	
		.01	
Constant	.35		1.82*
	.51		.45
South	-.09		-.29*
	.07		.09
Midlands	-.23*		-.11
	.08		.09
North	-.12		.43*
	.10		.11
Wales	-.48*		.94*
	.24		.18
Scotland	-.41*		.47*
	.13		.14
Inflation	.23*		-.01
	.07		.06
Unemployment	.23*		.00
	.04		.04
Taxes	.02		-.07
	.04		.04
Blue Collar	.02		.46*
	.09		.08
Union Member	-.44*		.26*
	.07		.07
Public Sector Employee	.08		.01
	.06		.08
Home Ownership	.36*		-.37*
	.08		.08
Age	.03		-.16*
	.03		.03
Female	.21*		-.04
	.07		.07
Family Income	.06*		-.05*
	.02		.02
Education	-.62*		-.45*
	.21		.20
σ_{CA}		.02	
		.06	
σ_{LA}		.34*	
		.08	
σ_{CL}		-.39*	
		.07	
Number of Observations		2131	
Log Likelihood		1476.5	

Table 3
Effects of Economics and Issues in the 1987 Election

		Conservatives	Labour	Alliance
Baseline		.34	.40	.26
Inflation	Better	.52	.30	.18
	Worse	.28	.43	.29
	Difference	.24	-.13	-.11
Unemployment	Better	.52	.31	.17
	Worse	.28	.43	.29
	Difference	.24	-.12	-.12
Taxation	Better	.36	.35	.28
	Worse	.31	.45	.24
	Difference	.06	-.10	.04
Redistribution	More Equal	.28	.47	.25
	Less Equal	.42	.34	.24
	Difference	-.14	.13	-.01
Welfare	More	.25	.50	.25
	Less	.45	.31	.24
	Difference	-.20	.19	.01
Crime	Civil-Rights	.30	.44	.26
	Law & Order	.36	.39	.25
	Difference	-.06	.05	.01
Defense	No Nukes	.23	.54	.23
	More Nukes	.44	.30	.25
	Difference	-.21	.24	-.02

Note: Probabilities are evaluated for a respondent with typical values for other variables. See the text for a precise explanation.

Table 4
Mean Position of Respondents on Issues
and Mean Placement of Parties by Respondents

	Conservative	Labour	Alliance	Respondents
Defense	8.0	2.1	4.9	5.2
Phillips Curve	6.4	2.3	3.8	3.5
Taxation	7.2	3.0	4.4	4.4
Nationalization	9.2	2.9	5.6	6.4
Redistribution	8.4	2.9	4.8	5.0
Crime	7.5	5.6	6.3	7.7
Welfare	7.9	2.6	4.3	4.5

Table entries for columns one through three are the mean placement of the parties on the 11 point-scale by all respondents giving a valid response. Column four is the mean self-placement of the respondents themselves.

Table 5a: Issue Simulations for Labour Support

Issues	Labour Min	Labour Actual	Labour Max*	Vote-Shares at Labour-Max* Cons	Lab	All
Defense	11.0	2.1	5.0	44.0	31.9	24.1
Phillips	11.0	2.3	1.0	44.9	30.1	25.1
Taxation	11.0	3.0	4.0	44.9	29.8	25.3
Nationalization	11.0	2.9	6.0	43.9	32.4	23.7
Redistribution	11.0	2.9	3.0	44.9	29.8	25.2
Crime	1.0	5.6	8.0	44.6	30.4	24.5
Welfare	11.0	2.6	3.0	44.9	29.9	25.2
Labour-Max* on All Issues[a]				41.9	36.2	21.9

Labour-Max* is the position Labour would have to be perceived at on each issue to get the maximum vote-share.

[a] The final row gives the estimated vote-shares if Labour were perceived to be at Labour-Max* for all of the seven issues.

Table 5b: Issue Simulations for Labour Support Two-Party Race (Alliance Removed)

Issues	Labour Min	Labour Actual	Labour Max_2^*	Vote-Shares at Labour-Max_2^* Cons	Lab
Defense	11.0	2.1	6.0	55.0	45.0
Phillips	11.0	2.3	2.0	57.4	42.6
Taxation	11.0	3.0	4.0	57.2	42.8
Nationalization	1.0	2.9	6.0	54.6	45.4
Redistribution	11.0	2.9	4.0	57.3	42.7
Crime	1.0	5.6	8.0	56.8	43.2
Welfare	11.0	2.6	3.0	57.3	42.7
Labour-Max_2^* on All Issues				50.2	49.8

Labour-Max_2^* is the position Labour would have to be perceived at on each issue to get the maximum vote-share in a two-party race.

[a] The final row gives the estimated vote-shares if Labour were perceived to be at Labour-Max_2^* for all of the seven issues.

Table 6a: Issue Simulations for Conservative Support

Issues	Cons Min	Cons Actual	Cons Max*	Vote-Shares at Cons-Max* Cons	Lab	All
Defense	11.0	8.0	6.0	48.0	29.0	23.0
Phillips	11.0	6.4	3.0	47.0	28.9	24.1
Taxation	11.0	7.2	5.0	47.4	29.0	23.6
Nationalization	1.0	9.2	6.0	46.1	29.4	24.6
Redistribution	11.0	8.4	6.0	46.1	29.4	24.6
Crime	1.0	7.5	8.0	45.0	29.8	25.2
Welfare	11.0	7.9	4.0	47.5	28.8	23.8
Cons-Max* on All Issues[a]				61.4	22.6	16.0

Cons-Max* is the position the Conservative party would have to be perceived at on each issue to get the maximum vote-share.

[a] The final row gives the estimated vote-shares if the Conservative party were perceived to be at Cons-Max* for all of the seven issues.

Table 6b: Issue Simulations for Conservative Support Two-Party Vote (Alliance Removed)

Issues	Cons Min	Cons Actual	Cons Max_2^*	Vote-Shares at Cons-Max_2^* Cons	Lab
Defense	11.0	8.0	6.0	59.7	40.3
Phillips	11.0	6.4	2.0	59.6	40.4
Taxation	11.0	7.2	4.0	59.7	40.3
Nationalization	1.0	9.2	6.0	60.1	39.9
Redistribution	11.0	8.4	4.0	58.8	41.2
Crime	1.0	7.5	8.0	57.5	42.5
Welfare	11.0	7.9	3.0	60.1	40.0
Cons-Max_2^* on All Issues				73.1	26.9

Cons-Max_2^* is the position the Conservative party would have to be perceived at on each issue to get the maximum vote-share in a two-party race.

[a] The final row gives the estimated vote-shares if the Conservative party were perceived to be at Cons-Max_2^* for all of the seven issues.

Table 7: Issue Simulations for Alliance Support

Issues	All Min	All Actual	All Max*	Vote-Shares at All-Max* Cons	Lab	All
Defense	11.0	4.9	6.0	44.3	30.1	25.6
Phillips	11.0	3.8	2.0	45.0	29.0	26.0
Taxation	11.0	4.4	4.0	45.0	29.6	25.4
Nationalization	1.0	5.6	6.0	44.5	29.8	25.7
Redistribution	11.0	4.8	4.0	45.1	29.6	25.3
Crime	1.0	6.3	8.0	44.3	29.7	26.0
Welfare	11.0	4.3	3.0	45.0	29.2	25.8
All-Max* on All Issues[a]				44.2	28.1	27.7

All-Max$_2^*$ is the position the Alliance would have to be perceived at on each issue to get the maximum vote-share.

[a] The final row gives the estimated vote-shares if the Alliance were perceived to be at All-Max$_2^*$ for all of the seven issues.

Table 8: Respondents' Views of the Economy and Taxes

		1987		1992	
Prices:	Increased a Lot	48.7	(1850)	67.7	(1091)
	Increased a Little	43.6	(1655)	28.9	(456)
	Stayed the Same	5.2	(198)	2.0	(39)
	Fallen a Little	2.2	(85)	1.2	(9)
	Fallen a Lot	0.3	(10)	0.2	(5)
Unemployment:	Increased a Lot	52.0	(1941)	76.0	(1189)
	Increased a Little	21.8	(813)	16.6	(286)
	Stayed the Same	9.0	(336)	3.5	(74)
	Fallen a Little	15.5	(579)	2.7	(27)
	Fallen a Lot	1.7	(65)	1.2	(10)
Taxes:	Increased a Lot	10.8	(373)	23.6	(256)
	Increased a Little	25.8	(888)	34.4	(489)
	Stayed the Same	19.7	(679)	17.8	(329)
	Fallen a Little	40.6	(1398)	21.7	(410)
	Fallen a Lot	3.0	(104)	2.5	(34)

Table entries are the percentage and number of respondents holding the indicated view of prices, unemployment, and taxes in each year.

Table 9: Economic Simulation: Estimated Vote Outcomes

	Cons	Labour	Alliance
1987	44.9	29.8	25.3
1992 Inflation	43.9	30.0	26.0
1992 Unemployment	42.6	30.4	27.0
1992 Tax	44.6	30.5	24.9
1992 Inflation/Unemployment	41.6	30.7	27.7
1992 Inflation, Unemployment, and Taxes	41.2	31.4	27.4

Note: Entries are predicted vote shares after setting the distribution of respondent opinions of the economy to match 1992 views of the economy. Based on 2131 respondents.